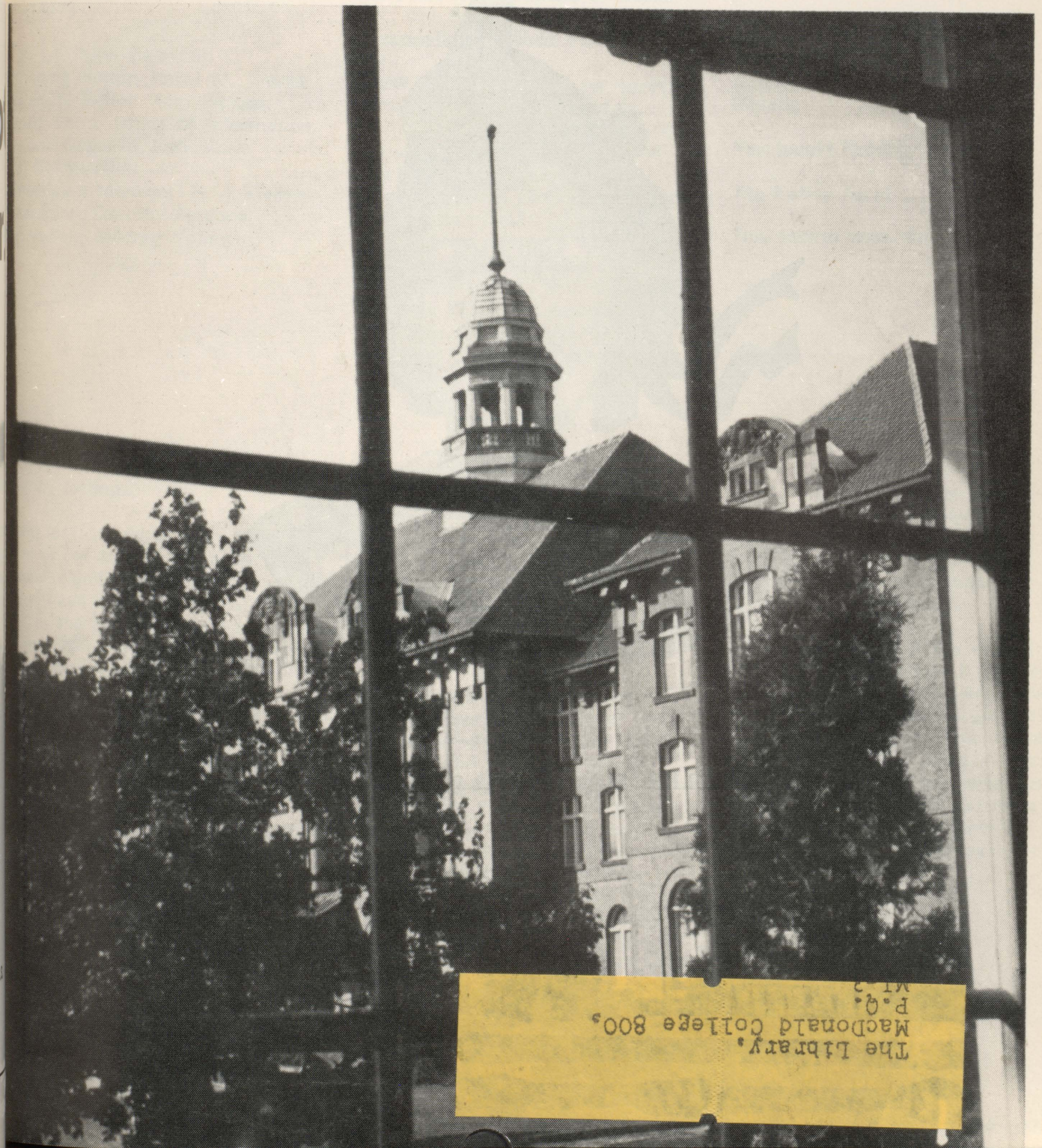


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In This Issue

Editorial	2
A National Population Policy for Canada	3
Macdonald Reports	7
The Family Farm	10
This Month with the QWI	15

Journal Jottings

In the last couple of years the July
issue of the Journal has taken on
special significance. Convocation
has always been a July feature but
only in the last two years has the
annual QWI Convention been held
in late May and, therefore, featured
in July as well.

Along with the list of graduates,
which is always a pleasure to
publish, we are delighted to have
the opportunity to publish the
address given at Convocation by
Dr. E. J. LeRoux, who received an
honorary degree of Doctor of
Science. His subject, population
control, has been much debated.

According to Dr. LeRoux, the time
for debate is over; what is required
now is action. My "spinsterish"
status is going to keep me from
making a comment, which may not
be setting a good example, but then
I feel I've already done my bit
toward zero population growth!

One hopes that there is never a
zero membership growth in the
Quebec Women's Institute. Their
strength and their strength in
numbers is as vital today as it was
in the past. Perhaps even more
vital. I talked to many of the
members at this year's Convention.
And I listened. Some of their
comments are in this issue. From
these comments and from many

more "off tape" one senses the
desire to get things done, to learn,
to exchange ideas, to keep with
tradition while making changes,
not for the sake of change but
where change is needed.

I was once asked if the W.I. did
anything but drink tea. I think that
by the time I had given my answer
the person was sorry the question
had been asked. You know, ladies,
of the good you're doing — let's
let others know so that when your
hard work is over and you relax
with a cup of tea, the comment
will always be, "they deserve it."

Hazel M. Clarke.

June, July, and August are the traditional tourist months in Canada. During this period thousands of people from the United States and other provinces of Canada will be visiting or travelling through the province of Quebec.

The reasons why an area such as Quebec attracts a large number of tourists stems not only from the natural beauty of "la belle province" but also from its rich cultural heritage. Since Quebec was one of the earliest settled areas of North America, its history dates back at least a hundred years before that of most other areas. It is this early history combined with the uniqueness of the French culture that seems to be the attracting force behind Quebec's tourism.

Yet when many people think of historical attractions in Quebec, Montreal and Quebec City are two locations that immediately come to their minds. This is because of the fact that not only are these two cities premier tourist attractions in their own right but also because they are heavily promoted to the tourist market by the tourism agencies of government. And the

payoff to this investment in promotion comes during the three summer months with increased sales to local merchants.

My point is that there are other areas of Quebec, particularly in the rural areas and small communities, that hold a potential for tourism development. Although they may have equivalent historical significance and tourist appeal as the "big-name" tourist attractions in Quebec, they are not known to the public simply because they have not been promoted. In many cases these attractions are unknown to many of the residents in the immediate surrounding area. When this happens there is very little chance for an outsider travelling through the area to become aware of their presence.

Quebec could probably take a lesson from Nova Scotia or some areas of upstate New York where such attractions are promoted to the traveller. Many counties or

Chambers of Commerce in these areas prepare handout newspapers for tourists which describe these often little known tourist attractions. These local tourist associations also advertise their counties in the travel sections of large metropolitan newspapers. One only has to travel through some of these "lesser known" areas to see the results of this promotion.

Quebec, it seems, has a tremendous potential for this type of effort. It has the type of historical attractions that people would want to come to see, if only they knew about them and had some help in finding them. Such a promotional campaign would make an excellent project for some civic group in the rural communities. It seems that either they take the initiative to do this or we will see the pattern followed so often in the past in other areas where an outside business interest will develop or reconstruct a tourist attraction and end up with the tourist dollar.

Gordon Bachman.

4 NATIONAL POPULATION POLICY FOR CANADA

by E. J. LeRoux B.A. M.Sc. Ph.D.

Convocation address given at
Macdonald Campus of McGill
University, June 2, 1973, on the
occasion of the receipt of a Doctor
of Science degree, honoris causa

Mr. Chancellor, honoured guests,
graduates, ladies and gentlemen.
I want to say how deeply moved
I am by the honour you have just
conferred upon me and wish you
to know that it is with great pride
that I accept admittance to the
company of McGill's many dis-
tinguished honorary graduates. I
have had many rewarding challenges
as a result of past association
with McGill, both as graduate and
professor, and I cannot help but
feel that today's renewed associa-
tion with my alma mater will
stimulate me to accept even greater
challenges in the future.

I want to congratulate the gradu-
ates here assembled who, just a
few moments ago, were also
admitted to the company of
scholars. Their long hours of prep-
aration towards greater responsi-
bility and leadership and service
will surely help sustain Canada
in meeting its many challenges
in the years ahead. It is with refer-
ence to one of these challenges
that I wish to address my remarks
to you today.

The Problem

The problem we are concerned
with may well have arisen as a
result of a providential instruction
given in Genesis, chapter 1, verse
28: "And God blessed them, and
God said unto them, be fruitful,
and multiply, and replenish the
earth, and subdue it; and have
dominion over the fish of the sea,

and over the fowl of the air, and
over every living thing that moveth
upon the earth." Man heeded that
call, to the point that there exists
in the world today an accelerated
population growth of unprecedented
rate, moving stealthily and rapidly
towards what many refer to as a
catastrophic global crisis. The most
successful animal the world has
ever known threatens to overrun
his environment, destroying in
the process not only many of his
fellow creatures but perhaps
himself as well. His present rate of
growth, 11 more individuals every
five seconds, assures a doubling
of the 3.5 billion people now living
on this planet by the first decade
of the year 2000.

A general warning of the problem
was given by Thomas Malthus
in 1798 when he predicted that
man would outstrip his limited
food supply and face decimation
of his numbers, as a result of
starvation, a general breakdown
of law and order, and from war
and pestilence.

Malthus, a prophet ahead of his
time, correctly interpreted the
results of the impending population
explosion but was ignored. And
man could ignore the warnings of
Malthus in 1798. Today, 175 years
later, he can no longer afford to
be oblivious to a warning that he
is on a one-way street to a cata-
clysm — that the problems
attendant on excessive population
growth are real and near immediate.

The Global Problem

The problem is first and foremost
a global one and one primarily of
numbers. Too many people taking
up too much of the land that ought
to be producing their food; de-

manding too many manufactured
objects; polluting too much of the
land, air, and water; consuming
too much of our raw materials
and energy and requiring more
food, which if provided invites
the birth of still more and more
people. Because such growth has
a fixed doubling time, the number
of earth inhabitants, which seemed
negligible for centuries, is, in a
mere instant of history, about to
reach the global limit. We are on
course for a population explosion
and the results of this explosion
will not be pleasant. Predictable
effects are that population growth
will stop, either because people
will starve, or raw materials will
give out, or pollution will surpass
liveable limits, or the stresses of
overcrowding will provoke war or
other ills. At such a juncture in
time, the world population will
drop by as much as a fifth in a
single generation, while the bottom
will drop out of life as we know
it for the rest of us. Real-life,
biological models of insect and
mice populations confirm the
undesirable consequences of
unchecked growth in man. One
lifetime is all that is required for
the completion of the event and
judging from the overwhelming
demographic evidence available
to us, the crisis is some 40-50 years
away — your lifetime and that of
your children — with total collapse
predicted for the year 2100, that is,
in the lifetime of your children and
your children's children.

The Canadian Problem

Much of the growth and environ-
mental stress affecting the world
is already being felt in Canada
and pollution is being used as the
indicator. Yet the call for planned

growth based on a sound population policy for Canada seems to many to be premature. Why, after all, should we have a planned population growth in a country the size of Canada whose 22 million inhabitants are at present on a zero growth course. The reasons are many.

Canada cannot dissociate itself from the global population problem. A solution at home gives guidance to a solution to the global problem. If a technically advanced country such as Canada is to convince the world that we should work cooperatively towards a global zero growth, we must be credible and show that we practice that which we preach.

Canada's present zero population growth is unplanned and temporary and it will be negated by renewed growth that is about to be generated by the high number of those under 25 years in our population. This group, alone, assures Canada of an increased growth for the next 20 years. For example, by the mid 1980s, it is estimated that from domestic sources alone, Canada's total labour force will have increased by 50 per cent.

Canada's 22 million inhabitants have a pattern of resource use, that is a life style, that is typical of a technologically advanced country and because we live in a cold country our per capita energy demand is at least 50 times greater than that of an individual in India. Stated another way, our 22 million inhabitants make demands on our environment considerably greater than that made by 46 million inhabitants elsewhere. Our ability to support humans at this energy

level is being sustained, at present, by large fossil fuel reserves located within our borders. These reserves are finite and it is predicted that they will become scarce and possibly exhausted in 30 to 50 years.

Canada also is facing a land crisis, because of the loss of valuable productive agricultural lands to urban sprawl. Few recognize that only seven per cent, or 140 million acres, of Canada's total land mass of 3.8 million square miles is high quality, arable, crop land. Under our climatic conditions, three acres of this land is required, on the average, to sustain one Canadian. On this basis, we could at best support a future population of 40 million inhabitants.

Canadian growth is mainly along the border with the United States where problems of density; ground-water contamination; arable land decrease; and waste disposal are already nearly insurmountable. If present trends continue, monstrous super cities will dominate eastern Canada from Quebec City to Windsor within 30 years and it is estimated that 94 per cent of all Canadians will live in this corridor. On present standards, this megalopolis world will be alienating, noisy and will devour resources at a staggering rate. Experts claim that such cities in the rich countries alone will consume so much of the world's resources, and at such a rate, that it will be impossible for poorer countries to become industrialized. The rich will continue to become the over-developed, the poor the never-to-be-developed. A preview of things to come can be seen in the United States where, at present, only six per cent of the

world's population accounts for nearly 50 per cent of the global consumption of essential minerals. By 1980, the figure will have risen to 70 per cent.

Any action on planned growth requires a lead time of 40 to 60 years before it can take effect. Since Canada's population 20 years hence has already been determined by the present number of those under 25 years, every year that action is postponed lessens the options for effective population planning.

Planned population growth must be based on reliable knowledge of the parameters involved. These are many and complex, including distributional, biological, demographic, and economic factors. The critical parameters will be our national and individual attitudes towards family size, family planning, regionalism and racialism.

Solutions to the Problems

There are at least two alternatives to the growth problem. There are those who argue we should do nothing, since the seas will provide the fish, the manna will be provided by the green revolution, and physicists will open the door to unlimited energy by harnessing hydrogen fusion. Doing nothing means unlimited growth and this alternative has to be rejected outright since it overlooks the true key factor of the population explosion problem, namely, numbers of people.

Our collective experience leads us to conclude that, among those whose special knowledge lies in the fields closely relevant to this question, there is indeed a con-

sensus that Canada's problem is one of over- rather than under-population. Present Canadian population growth trends leave little doubt that, in the next two or three decades, Canadians will experience a serious reduction in resources and in quality of life, with increased environmental problems, if we continue to encourage growth, human expectations, and resource use. Taking the "laissez faire" approach to the problem would constitute a serious abrogation of our responsibility towards the needs and aspirations of the people who will be living in Canada 20 to 30 years from now and of those in other less fortunate countries who might stand to benefit from a successful experience by us in stabilizing our numbers. Those who contend that Canada is under-populated are mainly individuals who by their occupation, private or collective, are already committed to the extraction or utilization of a non-renewable resource, or to the continued growth of industry and energy-consumption. These persons by tradition are accustomed to focus on the short-term rather than the long-term consequences of human actions.

Stabilize Population Size

The only acceptable solution to the problem is to stabilize population numbers. The environment we live in has only a limited capacity to provide our resource needs and to accommodate to our waste. In short, Canada's life support system is finite and the size of its human population must eventually be limited by the capacity of the environment to sustain it. For the present, the Canadian population

relies on a large temporary subsidy of its non-renewable resources to maintain its high standard of living. These resources must dwindle in the long run, leading to a reduction of Canada's carrying capacity. Since continued growth is not a solution to the Canadian population problem, our national objective must be to reduce the rate of growth and size of Canada's human population and stabilize it at a level that can be sustained.

Call For A Population Policy

In view of the impending seriousness of the Canadian population problem, a national policy on planned growth must be developed without delay. Such a policy should be as all inclusive as our Bill of Rights. It must be a legislated policy that will give guidance to subordinate policies on energy use, technology, family planning and land use, as well as to other policies — Federal and Provincial — that have implication for the welfare of present and future generations of Canadians.

The Federal Government has been appraised of the need for a National Policy by such eminent individuals as Dr. Solandt. Collectively, more than 20 Canadian biologists, including myself, submitted a brief to the Prime Minister informing him and his government of our concern. We were and remain concerned over the lack of reaction as well as action. We recognize however, that, politically, this is an extremely sensitive issue, appearing to threaten the moral as well as economic bases of our society.

We should be encouraged by the fact that a population policy was discussed at the Man and Resources for Canada National Workshop, at Montebello, in Quebec in November 1972. The relevant recommendation was "that, by 1975, the Federal Government of Canada enunciate a population policy aimed at the achievement of a stabilized population by the year 2000." This workshop, part of a national conference program sponsored by the Canadian Council of Resource and Environment Ministers has as its principal objective "to provide a national forum for debate concerning the formulation and recommendation of guidelines to achieve and sustain an optimum balance of social and economic benefits derived from the natural resource base". The focal point of the two-year program will be the Man and Resource Conference in Toronto in November 1973, where population, growth ethic, and social value are three of the many issues to be publicly debated.

Implementation

If Canadians wish to change the direction of their population growth, they must address themselves to the authority that will be most effective in implementing this change and, in my view, this authority is the Federal Government. Our national government has, at its disposal, a myriad of ways — some psychological, some economic — to bring about successful action in any field, be it alone or in concert with provinces and private citizens. The population issue is of such fundamental concern to present and future generations of Canadians that the successful issuance and implementation of

a Canadian population policy is the responsibility of the national government. How else can we ensure that associated economic and social policies such as immigration, health, education, housing, urban development, resource management, will emanate from the tenets of the policy and not vice versa.

Stumbling Blocks to Implementation

We must recognize that a population policy for Canada will not be easy to enunciate and implement. Growth, for the sake of growth, has been an ideology of our civilization to the point that, today, our society has a vested interest in population growth; in growth of the gross national product, in growth of industry, and in all those other areas of growth that are sacred in traditional political and economic dogma.

The human mind finds it difficult to accept that a relationship exists between population numbers and even the most obvious of our environmental ills. The problem is further compounded by the fact that population control would mean decisions that may well reduce our present standard of living in order to provide a better life for future generations.

There is also that strong desire in certain sectors of our society that they should not be assimilated as in the melting pot concept. An increase in their numbers assures them of not being so absorbed.

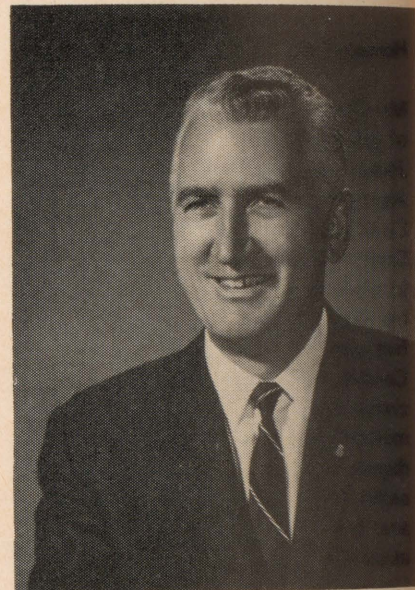
There are also many who firmly believe that population control is an infringement on individual rights.

Finally, in regard to impediments, the Canadian position of power in the world would be reduced if our population was held at its 22 million while other nations are on a population growth binge.

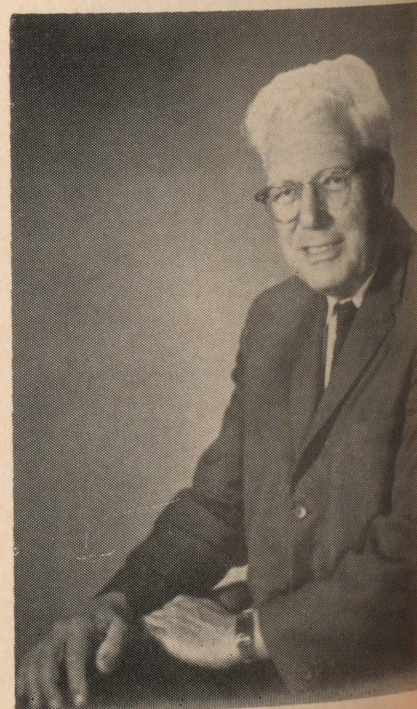
Conclusions

In conclusion, ladies and gentlemen, I would like to reiterate that, when half of the people of the world are still going hungry, if not every day of the week at least several times a week, Canadians cannot remain complacent about population growth. The growth problem is one to which all countries contribute and are influenced by. Since we live in the same world as the "starved", we must question seriously our right to our greater share of the resources and energy that belong to all. A population policy for Canada would serve to establish the credibility of the Canadian nation's concern for the world's numbers problem both at home and abroad and to the seeking of a lasting solution to this problem.

Mr. Chancellor, I trust that I have presented a challenge to this graduating class. The main burden of solution will be theirs.



Dr. E. J. LeRoux, above, was introduced by Dr. F. O. Morrison, below, whose remarks are on the following page.



Convocation '73

Honorary Degree

Mr. Chancellor, I have the honour of presenting to you Dr. Edgar Joseph LeRoux, eminent scientist, Associate Director, Planning and Co-ordination, Canada Agriculture. Born in Ottawa in 1922, raised in a bilingual family in rural Ontario, his education was interrupted by five years of active service in the Canadian Navy. He returned to civilian life, a married man, determined to pursue a university degree. Biology was the logical outlet for his interest in field and forest. In quick order he acquired a B.A. from Carleton University, an M.Sc. and a Ph.D. from McGill, the last in 1954. At McGill he studied on the Macdonald Campus. As an undergraduate he had become associated with the Canadian Department of Agriculture and continued in their employ after graduation.

While at the federal laboratory at St. Jean, Québec, Dr. LeRoux instigated pioneer work in quantitative field studies of the population dynamics of orchard pests and inspired his colleagues both in St. Jean and Ottawa to do likewise with our pest insects. He also successfully translated the results of his investigations into orchard practice.

Dr. LeRoux returned to McGill in 1962 as Associate Professor of Entomology at Macdonald College. He attracted a number of students in population studies and energetics and as a result the LeRoux approach to ecological investigations of agricultural pests is in evidence today across Canada and in both New Zealand and Australia.

Three tenets help to explain Dr. LeRoux's success. He holds that the biota (including man) is the most challenging study area that exists; that any biological problem is soluble if you design your investigation properly and work hard enough; and that the best research is useless unless communicated to others and finally applied to the welfare of man.

Dr. LeRoux returned to Canada Agriculture in 1965 as co-ordinator of Entomological Research and has risen rapidly to his present position. He has found time as well to serve both his profession and his community in innumerable organizations. He has been President of the Entomological Society of Canada, President of the Navy League of Canada, and President of the Biological Council of Canada.

Dr. LeRoux's status in the wider field of Agriculture is best attested to by his election as Agricultural Representative on the Industry Trade and Commerce, Technical Apple Commission, which has been visiting several countries.

For his distinguished contributions to science and to the teaching of science, for his tireless dedication and infectious enthusiasm I ask you to confer on this eminent graduate, McGill University, Dr. E. J. LeRoux, the degree of Doctor of Science, *honoris causa*.

Prof. Frank O. Morrison,
Chairman,
Department of Entomology.

Faculty of Agriculture

Diploma in Agriculture

*Candidates presented by
Professor P. Y. Hamilton,
Director of the Diploma Course*

Baxter, Michael James, Lachine, Que.,
Second Class Honours;
Clark, Cedric Herman, Montreal, Que.,
Second Class Honours; Minister of
Agriculture and Colonization Silver
Medal;
Gass, Peter Hans, Lennoxville, Que.
Second Class Honours;
*Hale, James Elwyn, Dorval, Que.
Second Class Honours;
Livingstone, David Wendell, Danville,
Que.;
McClintock, George Walter, Ormstown,
Que., Second Class Honours;
Mock, Gordon Alfred, Montreal, Que.,
Second Class Honours;
Montrichard, Alan, Laval, Que.,
Second Class Honours; Minister of
Agriculture and Colonization Gold Medal;
*Niven, Peter, Longueuil, Que.
Second Class Honours;
Perry, Gillian Rosemary N., Montreal, Que.;
Second Class Honours;
*Reddick, Alan George, Howick, Que.
Robertson, James A., Pointe Claire, Que.,
Second Class Honours;
Scoble, Robert William, Howick, Que.,
Second Class Honours;
Straughton, James Edward, Ste. Anne de
Bellevue, Que., Second Class Honours;
Willox, Stuart Alexander, Ste. Anne de
Bellevue, Que., Second Class Honours;

*In absentia

Degree of Bachelor of Science in Food Science

*Candidates presented by
Professor H. R. Neilson,
Director of the School of Food Science*

*Carmichael, Valerie Kathleen, Centreville,
N.B., (Consumer Education), First Class
Honours; J. W. McConnell Scholar; Gov-
ernor General's Medal;
Cowan, Janise Irene, Sutton, Que.,
(Dietetics), Second Class Honours;
Diakowski, Margarita Karolina, Montreal,
Que., (Dietetics), First Class Honours;
Douglas, Elizabeth Myra, Baie d'Urfé,
Que., (Dietetics), Second Class Honours;
Edwards, Ruth Anne, Escuminac, Que.,
(Dietetics), Second Class Honours;

Fairchild, Janet Irene, Pointe Claire, Que., (Dietetics), First Class Honours;
 Fransblow, June Mary, Saint John, N.B., (Dietetics), Second Class Honours;
 Gill, Mary Lee, Arvida, Que., (Dietetics), First Class Honours;
 Houstoun, Barbara Edith, Montreal, Que., (Dietetics), First Class Honours; University Scholar;
 Hykle, Barbara Louise, Pointe Claire, Que., (Dietetics), Second Class Honours;
 Johnston, Dianne Lynn, Ste. Anne de Bellevue, Que., (Consumer Education), Second Class Honours;
 Kandalaf, Judith Ann, Sherbrooke, Que., (Food Science), First Class Honours; University Scholar;
 Lake, Rosemarie Elaine, St. Johns, Antigua, W.I., (Dietetics), Second Class Honours;
 Murray, Karen Ann, Dorval, Que., (Dietetics), Second Class Honours;
 Neal, Mary-Jane, Saint John, N.B., (Dietetics), Second Class Honours;
 Ohanessian, Nina Nevart, Montreal, Que.; Robertson, Ardeth Faye, Sherbrooke, Que., (Food Science), Second Class Honours;
 Thomson, Elaine Catherine, Montreal, Que., (Dietetics), First Class Honours; Harrison Prize;
 Thomson, Jane Susan, Ste. Anne de Bellevue, Que., (Dietetics), Second Class Honours;
 Young, Barbara Heather, Pointe Claire, Que., (Dietetics), Second Class Honours.

*In absentia

Degree of Bachelor of Science in Agriculture

Candidates presented by
Professor A. C. Blackwood,
Dean of the Faculty of Agriculture

Alexander, Fergus Gordon, Lachine, Que., (Animal Science), Second Class Honours;
 Arsenaault, Walter Joseph, Summerside, P.E.I., (Soil Science), Second Class Honours;
 *Beebe, Douglas Raymond, New Carlisle, Que., (Animal Science), Second Class Honours;
 Bennet, Gregory James, Grenville, Que., (Agricultural Economics);
 Bow, James Winston, Oxford Station, Ont., (Agricultural Economics), Second Class Honours;
 Brown, Barbara Ruth, Truro, N.S., (Environmental Biology), Second Class Honours;
 Burroughs, David Charles, Sherbrooke, Que., (Animal Science), Second Class Honours;

Carrière, Roger Maurice, Ottawa, Ont., (Plant Science), Second Class Honours; Cutler Shield;
 *Cook, Douglas Ivan, Middle Musquodoboit, N.S., (Microbiology), First Class Honours; University Scholar;
 Côté, Jean Joseph Henri, Knowlton, Que., (Animal Science), Second Class Honours;
 Côté, Michel Aimé Paul Joseph, Montreal, Que., (Agricultural Economics), Second Class Honours;
 *Crozier, Alan Henry, Summerside, P.E.I., (Microbiology);
 *Dalton, John Edward, Summerside, P.E.I., (Environmental Biology), Second Class Honours;
 Davidson, Norman C., Lachine, Que., (Microbiology), Second Class Honours;
 DeFreitas, Peter Basil, Demerara, Guyana, S.A., (Agricultural Economics), Second Class Honours;
 Denike, Douglas Grant, Ottawa, Ont., (Microbiology), Second Class Honours;
 Dods, Robert Forrest, Trois-Rivières, Que., (Environmental Biology), Second Class Honours;
 *Drozdowski, Joseph Peter, Ste. Anne de Bellevue, Que. (Microbiology), First Class Honours; University Scholar; Gray Medal;
 Enman, John Robert, Charlottetown, P.E.I., (Plant Science — Agronomy), Second Class Honours;
 Fortin, André François, Shawinigan, Que., (Food Chemistry), First Class Honours; University Scholar;
 Frizzle, Allen Wilson, Brome, Que., (Animal Science);
 Gardner, John Olin, Pierrefonds, Que., (Plant Science — Horticulture), Second Class Honours;
 *Georgeson, Eric, New Glasgow, N.S., (Plant Science — Plant Protection), Second Class Honours;
 Gibb, Gavin Charles, Abbotsford, Que., (General Agriculture Science), Second Class Honours;
 Goodfellow, Braden Timothy, Richmond, Que., (Animal Science), First Class Honours; J. W. McConnell Scholar; Canadian Society of Animal Production Prize; Stern Cup;
 Gordon, David James, Ste. Anne de Bellevue, Que., (Zoological Sciences), First Class Honours; Lochhead Memorial Prize;
 Johnston-Stewart, Michael Simon, Lock-
 erbie, Scotland, (Agricultural Economics), Second Class Honours;
 Ladd, David D., Valois, Que., (Agricultural Economics);
 Lalonde, Charles Michel, Vankleek Hill, Ont., (Animal Science), Second Class Honours;
 Lloyd-Smith, Jennifer Marie, Montreal, Que., (Animal Science), Second Class Honours;

MacCulloch, Ross Douglas, Greenfield Park, Que., (Wildlife Resources), Second Class Honours;
 Massicotte-Côté, Lise-Marie, Montreal, Que., (Agricultural Economics), Second Class Honours;
 *McCallum, Ian Malcolm, Olivos, Buenos Aires, Argentina, (Animal Science), Second Class Honours;
 Mérineau, Frances Mary, Ste. Anne de Bellevue, Que., (Microbiology), Second Class Honours;
 Morin, Roderick Brendan, Pointe Claire, Que., (Wildlife Resources), Second Class Honours;
 Mudie, Mark George, Farnham, Que., (Agricultural Economics), Second Class Honours;
 *Mullin, Daryl Russel, Moncton, N.B., (Soil Science), Second Class Honours;
 Mustafa, Jamil, Amman-El-Wehdat, Jordan, (Environmental Biology), Second Class Honours;
 Neufeld, Ronald James, Beaconsfield, Que., (Microbiology), First Class Honours; University Scholar;
 Ng Kwai Hang, Kwet Kiene, Port-Louis, Mauritius, (Animal Science), Second Class Honours;
 Othman, Morni, Brunei, Borneo, (Plant Science — Agronomy), Second Class Honours;
 *Pierce, John Allison, Kingston, N.S., (General Agricultural Science), Second Class Honours;
 Pilgrim, Dale Kathleen, St. Laurent, Que., (Wildlife Resources), First Class Honours; University Scholar;
 Prescod, Alfred Wesley, Kingstown, St. Vincent, W.I., (Plant Science — Horticulture), Second Class Honours;
 Stephens, Christian Aurelius, Etobicoke, Ont., (Food Chemistry), Second Class Honours;
 Stewart, Alan James, Kingston, Jamaica, (Soil Science), Second Class Honours;
 Stocker, Max, Guelph, Ont., (Wildlife Resources), First Class Honours; University Scholar; Governor General's Medal;
 Tong, Alan Kwai Wah, Kowloon, Hong Kong, (Animal Science), Second Class Honours;
 Van der Leest, Jan, Ste. Anne de Bellevue, Que., (Soil Science); Second Class Honours;
 Waddy, Richard Fred, Salisbury, N.B., (Agricultural Economics), Second Class Honours; University Scholar;
 Walter, Robert Ian, Baie d'Urfé, Que., (Environmental Conservation), Second Class Honours;
 Wright, George Arthur Harrison, Pointe Claire, Que., (Agricultural Economics), Second Class Honours;

*In absentia

Degree of Bachelor of Science in Agricultural Engineering

**Candidates presented by
Professor A. C. Blackwood,
Dean of the Faculty of Agriculture**

Baxter, John William, Yorkshire, England;
Bohaker, Brian Randall, Granville Ferry,
I.S., Second Class Honours;
Forimer, Robert Julian, Beaconsfield, Que.,
Second Class Honours;
Price, Richard Hughes, Foster, Que., Sec-
ond Class Honours;
Témillard, Réjean René, Franklin Centre,
Que.;
Touprole, Donald Lloyd, Ormstown, Que.,
Second Class Honours;
Touprole, Suzanne Francine, Moose-Creek,
Ont., First Class Honours; J. W. McCon-
nell Scholar;
Trenholm, William Randall, Port Elgin,
I.S., Second Class Honours;
Veigensberg, Allen, Laval, Que., Second
Class Honours.

*In absentia

Faculty of Graduate Studies and Research

**Candidates presented by
Professor G. MacLachlan,
Pro-Dean of the Faculty of
Graduate Studies and Research**

Master of Science

Akonoby, Matthew Okafor, B.Sc. (Agr.
Eng.) (Israel Institute of Technology)
Nigeria (Agricultural Engineering);
Aigar, Dave, B.Sc.F. (Toronto), Ontario
(Woodlot Management);
Arntfield, Peter W., B.Sc. (Guelph),
Ontario (Entomology);
Borrel, Bernard, B.Sc. (Agr.) (McGill),
Holland (Plant Pathology);
Bunyaphlanan, Hakhon, B.Sc. (Agr.)
(Philippines), Thailand (Agricultural
Engineering);
Chomchan, Sapon, B.Sc. (Agr.) (Kaset-
sart) Thailand (Soil Science);
Ho, Chi Kuen Amy, B.Sc. (Provincial
Chung-Hsing) China (Agronomy);
Kheirandish, Reza B.Sc. (Agr. Eng.)
(Tehran), Iran (Agricultural Engineering);
Kumar, Akhlesh, B.Sc. (Physics) (Ben-
ares), India (Agricultural Physics);

Lee, Sai-Keung, B.Sc. (Lakehead), Que-
bec (Entomology);
Liu Man Hin, Joseph Vee-Koon, B.Sc.
(Agr.) (McGill) Mauritius (Agronomy);
Miller, Percy Lincoln, B.Sc. (Agr.) (West
Indies), West Indies (Soil Science);
Muir, Derek Charles Gordon, B.Sc.
(McGill), Quebec (Agricultural Chemis-
try);
Parnis, Elizabeth M., B.Sc. (Liverpool),
England (Plant Pathology);
Shady, Aly, B.Sc. (Agr.) (Cairo), Egypt
(Agricultural Engineering);
Srivastava, Ayodha Nath, B.Sc. (Luck-
now), M.Sc. (Lucknow), India (Micro-
biology);
Thompson, Linda, B.Sc. (Sir George
Williams), Quebec (Microbiology).

*In absentia

Doctor of Philosophy

*Cameron, Peter J., B.Sc. (Canterbury),
New Zealand (Entomology)
"The bionomics of the apple-maggot,
Sly, *Rhagoletis pomonella* (Diptera:
Tephritidae)";
Clark, John H., B.S.A. (Ontario Agri-
cultural College), M.Sc. (McGill),
Ontario (Agricultural Engineering)
"Automatic control of field machines:
engineering, economic and social
aspects";
Faubert, Gaétan M., B.Sc. (Sherbrooke),
M.Sc. (Montreal), Quebec (Parasitology)
"Suppression of the immunological
response in experimental trichinosis
in mice";
Gow, John Alexander, B.S.A. (Guelph),
M.Sc. (Guelph), Ontario (Microbiology)
"Growth of a Marine *Pseudomonad* at
Suboptimal Na⁺ Concentrations";
Hominick, William M., B.Sc. (Manitoba),
M.Sc. (Manitoba), Manitoba
(Parasitology)
"Relationships among *Leidyne-
ma appendiculata*, *Hammerschmidtella*
diesingi (Nematoda: *Thelastomatidae*) and
the American cockroach";
Iqbal, Muhammad Mohsin, M.Sc.
(Lyalpur), M.Sc. (McGill), West Pakistan
(Soil Science)
"Nitrogen Movement and Losses from
Application of Animal Wastes to Soils";
Knipfel, Jerry Earl, B.S.A. (Saskatche-
wan), M.Sc. (Saskatchewan), Alberta
(Animal Science)
"Factors affecting free amino acid levels
in blood plasma and other selected
tissues of weanling swine";

*Peterson, Andrew James, B.Sc.
(Canterbury), New Zealand (Agricultural
Chemistry)
"Steroid Estrogen, Progesterone and
Androgen Concentrations in the Plasma
of the Domestic Fowl in Relation to
the Ovulation Cycle";
Salloum, J. Duane, B.Sc. (Eng.)
(Saskatchewan), M.Sc. (Saskatchewan),
Saskatchewan (Agricultural Engineering)
"Land Disposal of Newsprint Mill
Effluents";
Tobe, Stephen S., B.Sc. (Queen's),
M.Sc. (York), Ontario (Parasitology)
"Aspects of nutrient transfer during the
reproductive cycles of the female of
the tsetse fly, *Glossina austeni*
Newst";
Warnaars, Benjamin Caspar, B.Sc.
(Agr.) (McGill), M.Sc. (McGill),
Quebec (Soil Science)
"Soil Factors Affecting Corn (*Zea mays*
L.) Root Growth, Fertilizer Nitrogen
Uptake and Nitrogen Leaching Losses
in Three Quebec Soils".

*In absentia

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture and Colonization

The Prevention of Calfhood Diseases

(The following is a copy of a recent speech given by Dr. Jean Mauffette in Ormstown, Que.)

The prevention of calf diseases is directly connected with a number of factors that the farmer dare not neglect without risking serious financial losses. The latest statistics show that over 12 per cent of the calves born in Quebec each year die from various diseases before reaching the age of six or seven months. Moreover it is important to realize that this figure is only a pale reflection of the problem since it does not take into account the big losses due to morbidity, that is to say from retarded growth and costs of medicaments.

In order to apply a comprehensive program of Preventive Veterinary Medicine, our entire attention must be focused on the animal from its birth, and even before, to ensure its survival and longevity. This implies sound knowledge of the chief diseases and accidents to which the newborn animal is liable and also adequate management and at least minimum hygienic conditions if a certain degree of success is to be achieved.

There are essential principles that the farmer must observe in raising calves if he is to get maximum yields and quicker profits. In view of the statistics just referred to, there is certainly room for considerable improvement in traditional calf-rearing methods and for stricter control of the chief disease affecting the newborn animal. It is appropriate here to consider two types of calf raising: 1) "domestic"

raising of vealers and herd replacements, and 2) commercial raising of veal calves. We shall deal here with the rearing of replacement calves. It involves two classes of animals: those intended for breeding purposes (i.e. replacement calves), and those that are fattened and sold owing to their poor genetic quality or because they are of the undesired sex (i.e. steers and heifers sold for slaughter at 1,000 to 1,100 pounds). For those farmers who have the opportunity to participate in the F_1 program, that is to say the mating of dairy cows with a bull of an "exotic" breed — in this case the Chianina, the methods used in rearing the resulting crossbred heifers are much the same as those used in rearing replacement heifers. Where the F_1 program is in effect we are encouraging farmers to take advantage of this program because experience has shown that the additional income it has brought them has been appreciable.

Care Of The Dam

There are a number of essential precautions which must be taken with regard to the dam to protect her calf against post-natal infections and even deformities caused by nutritional deficiencies. To start with, one may mention chronic colibacillary mastitis of the end of lactation. Once the cow is dry such cases must be treated so that, when she calves, the newborn calf's digestive tract will not get infected by mastitic colostrum, because colon bacilli are the chief agents of diarrhoea in young calves. As regards the nutritional requirements of a pregnant cow, these are perforce lower in protein than when she is milking; a 15 per cent protein

meal accompanied by good mixed hay and good-quality corn silage is sufficient. However, it must be kept well in mind that during the final months of pregnancy, the dam has to make two thirds of the calf's bone structure, in addition to rebuilding her own reserves of calcium, phosphorus and other elements. Hence it is necessary to make up for possible deficits of major and minor elements in the basic forage ration with a supplement of vitaminized minerals served free-choice to the pregnant cow; otherwise one risks exposing the calf to deficiencies that may show up as rickets and osteomalacia. We recommend vitaminized minerals with a calcium/phosphorus ratio of 1/1. The minerals should contain 150,000 I.U. of vitamin A and 45,000 I.U. of vitamin D₃ per pound.

When discussing the needs of the pregnant cow, one must particularly insist on the surroundings in which she is going to have to calve. If the place meets elementary standards of hygiene, the pathological troubles likely to affect the newborn calf will be reduced by 50 per cent.

Parturition should take place in a clean, well-ventilated place with a relative humidity below 70 per cent. The ideal temperature for it in winter is between 55 and 57 degrees Fahrenheit — without draughts. To achieve these ideal conditions it is necessary to have a maternity stall located in a favourable place in the cow-barn. Too many calves still get dropped in the gutter and are discovered next morning floundering in the manure or stillborn. Whenever a new barn is to be built, provision should

be made for one 12' x 12' calving stall per 20 cows, with plenty of litter.

Assistance For The Calf

The first hazard lying in wait for the calf during its birth is asphyxiation. During gestation its oxygen supply is brought to it by the umbilical cord via its mother's blood. As soon as the cord is broken the calf must obviously begin to breathe the outside air. This change in respiratory mode takes place in a few minutes. It thus becomes necessary in many cases to apply artificial respiration, either by traction of the tongue and pressure on the ribs, or by holding the calf by the hind legs to assist irrigation of the brain by the blood. Furthermore, it very often happens that the calf's mouth and nostrils are clogged with mucus matter that impedes the passage of air. The farmer's help is therefore necessary, not only in the case of dystocia but also at normal calvings.

Drying Off The Calf

All farmers agree in maintaining that the dam, urged by her maternal instinct, still has the best way of drying off the newborn calf by stimulating the circulation of its blood and warming it. She does it, of course, with her tongue. This is not a survival factor but it has its importance nevertheless; indeed we have seen weakly calves undergo a real resuscitation from this attention from the mother.

Umbilical Disinfection

Another danger (and by no means the least) awaits the calf as soon as it is born, namely umbilical

infections. When the umbilical cord is broken, the navel becomes an open doorway to every microbial and viral infection. Since the nascent calf does not have in its blood system the antibodies capable of effectively combating germs, it is absolutely necessary to bar the door on these microorganisms. It is thus essential to daub the calf's navel at birth with a suitable disinfectant — five or seven per cent tincture of iodine for example. This disinfection should be repeated after 24 hours.

Resistance To Disease

Colostrum: It is necessary to lay particular stress on the importance of the calf's having access to colostrum within the hours just after its birth, as it is then that absorption by the intestine is at its best. This first milk of the dam, if it is healthy, contains the essential lactoglobulins which will transmit to the calf the antibodies needed to fight germs. It also acts as a laxative to rid the digestive tract of the meconium which is the excrement of gestation. It is very important that the cow should not be milked before the calf has had a chance to drink the colostrum, because the unleashing of milk secretion has the effect of completely changing the nature of the fluid. The dam's teats must be washed and disinfected before the first milk is drawn, especially if it is sucked by the calf.

Vitamins A, D, and E: Besides this indispensable access of the calf to colostrum, another preventive measure must be taken, namely the supplying of vitamins A, D, and E orally or by injection, during the first days of the calf's life. This

is a very important factor of resistance to many diseases, particularly colibacillosis and nutritional myopathie (white muscle disease), which shows up as paralysis of the limbs.

Feeding And Housing

The aforesaid preventive measures having been taken, the farmer's attention must be focused on two very important factors if he wants to make sure not merely that the calf will survive but that its growth will not suffer setbacks. These basic factors are feeding and housing.

Feeding

Everybody agrees in recommending that the calf receive its mother's milk for at least six to seven days after its birth, but there are two different methods of feeding it. Some farmers let the calf suck while others prefer to feed it from a pail. I personally prefer the second method because of the damage the calf may cause to the cow's udder when suckling. However, what is important to watch is the quantity of milk drunk and how fast it is imbibed. A calf that can suck whenever it wants to (say five to eight times a day) will look after its feed requirements more easily and of its own accord. On the other hand, a calf that gets to suck only twice a day is exposed to a food overload and to indigestion which will predispose it to diarrhoea if it drinks too much milk and drinks it too fast. It should always be remembered that the calf should not drink more than 10 pounds of milk per 100 pounds of live weight per day.

Pail feeding makes it easier to control the quantity of milk the calf should drink, but here one must insist on the need for strict cleanliness of the containers used for this purpose. They must be washed and disinfected after each feeding and also between calves. Unsanitary pails can cause gastroenteritis that is very hard to control owing to the creation of antibiotic-resistant strains of bacteria. Two other points also need attention in the case of pail feeding, namely strict regularity as to feeding time and proper temperature of the milk fed, which must be between 98 and 102 degrees Fahrenheit, or that of milk as it comes from the cow's udder. So much for the feeding of the calf during the first week.

Some farmers, struggling to fill their milk quota, start feeding their calves the milk replacement powder sold by feed companies. It is very important to pay attention to the quality of the product used for this purpose and also the uniformity of the mixture. The milk powder must be reconstituted with water at 180°F to promote the solubility of the fat and avoid the formation of lumps that can cause gassy indigestion.

Whether the calf is fed on whole milk or substitute, it should have access to an 18 to 20 per cent crude-protein starter meal containing 72 to 74 per cent T.D.N., starting the second week. It should also have young green-coloured hay and clean wholesome water available ad lib. During the first few days the calf will pay little attention to it but gradually it will get used to eating some meal and taking a few wisps of hay and also a few swallows of water. This free access

to meal, hay, and water will save it from surfeits of food and digestive troubles at weaning owing to too sudden change of feed. In fact, the gradual ingestion of coarser food will allow it to develop its various stomach compartments, in particular the omasum and the reticulum. When it is about seven to eight weeks old, the calf will be eating about one to 1¼ pounds of meal a day. Weaning should be over and done with at that age but the quantity of water it drinks should then be carefully controlled. Starting at the ninth week, it should have free access to vitaminized minerals, preferably a mixture of salt (about 25 per cent), calcium, and phosphorus in equal proportions, minor elements such as iodine, copper, iron, cobalt, zinc, and manganese, and vitamins A and D.

Housing

While feeding is an important factor in preventing gastroenteritis and colibacillary infections of calves, housing plays an important part in preventing diseases of the respiratory system. Furthermore, diarrhoea being the number one disorder in domestic calf-rearing operations, a stop must be put to its propagation among the stock by applying strict hygienic measures. Hence the calf's ecology — that is to say the surroundings in which it lives — assumes great importance. The main obstacle to contend with arises from the way barns are built and their ventilation. Our climate being what it is in winter, there is no doubt that most of the old buildings were not designed with a view to the comfort and sanitary requirements of calves. The barns are either cold or badly ventilated. Ideally the temperature

should be between 60° and 68°F without too wide fluctuations. The calf quarters must be situated in a dry place sheltered from draughts. Above all, sudden temperature changes and corners of the cow-barn where the walls sweat must be avoided. Some farmers provide a source of artificial warmth for newborn calves. One is bound to encourage this practice. All these health measures in the field of housing are intended to prevent pneumonia which is such a common disease in winter and one that is often associated with colibacillosis or infectious diarrhoea.

When the calf is able to take its first steps, the question of where to put it arises. Some farmers tether it in the feeding alley in front of its mother or even in the alley behind her. Others put it in a pen with older calves. It need hardly be said that these methods are not advisable. Nor should it be necessary to point out that the newly-born calf is a frail creature susceptible to every infection in its environment — that is to say the barn, which is not exactly an aseptic place. It is therefore most important to prevent the calf from becoming infected by a milieu that has itself been infected either by the cows or by older calves and thus having its very survival threatened. For it must never be forgotten that, in a stabled herd, there are nearly always one or more animals suffering from a localized or generalized infection that may be transmitted to the young stock. The risk is all the greater because a disease often exists in a chronic state and as a result of successive passages the germs may have acquired a condition of special virulence in which they are resistant

o antibiotics. This happens with pneumonia and persistent diarrhoeas, which reappear in each new crop of calves in a herd.

Individual Stalls

For the foregoing reasons we recommend raising calves in individual stalls or pens where they cannot get in contact with any other neighbouring calves, until they are four or five weeks old. These stalls should be at least 6 feet long by 2 feet wide and 3½ feet high. They should be of simple construction, easy to clean and disinfect.

The floor should be slotted and about 8" from the ground to allow the droppings to fall through and to facilitate washing out and disinfection, which should be done daily. Straw litter should be avoided unless it is chopped. Each pen should be provided with a self-waterer having a controlled output, a fodder rack and a meal box. Every such stall should of course be disinfected whenever a calf is put into or removed from it. These individual stalls, if intelligently used, are clearly the ideal calf-housing arrangement at which progressive farmers should aim when planning new constructions.

Communal Pens

Mostly, however, it is a matter of making the best of the existing buildings that most farmers have to raise calves in. Hence, communal pens are favoured by the majority. They offer a better alternative to tethering calves in the feed alley or the manure alley till they are five or six weeks old but, if they

are going to be effective, they must satisfy certain basic standards. The number of calves kept in one should never exceed six and the calves should be fastened so that they cannot suck one another's navel or ears. Calves kept together should be approximately the same age; the range should not exceed three months. They should have plenty of litter and it should be changed daily. Pens should be disinfected every 10 days with creolin or lye (nine ounces in five gallons of

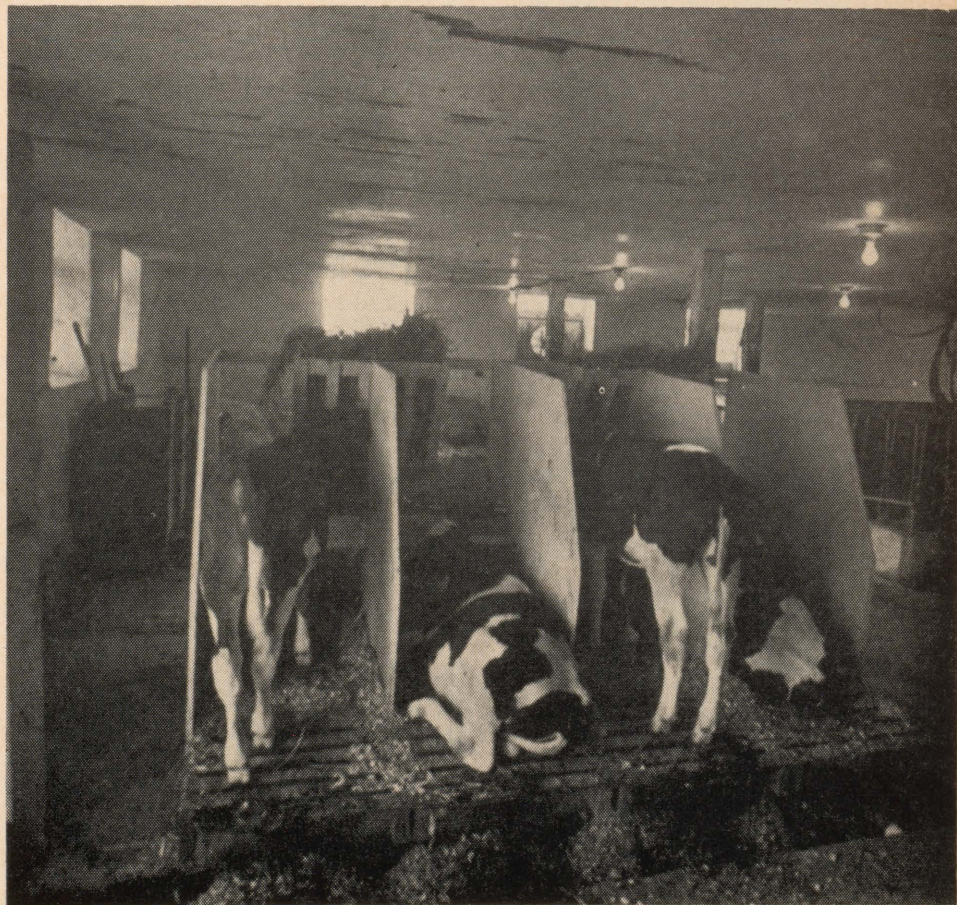
water). The temperature in communal calf pens should be the same as that in individual pens (ideally 60 to 68°F) without wide fluctuations.

Calf Treatments

Operations entailed in calf management include castration of males, dehorning, removing supernumerary teats of heifers and identification.

Castration: Castration at one or two months old — if done under

These individual stalls for calves are on the Macdonald College Farm.



hygienic conditions — is, in our opinion, preferable to castration at six or seven months, because the dangers of haemorrhaging and operational shock are less at one or two months.

Dehorning: Most farmers prefer calves without horns. In this case also it is preferable to prevent horns from growing rather than remove them from the adult animal. Two methods of removing the horn bud can be used. If an electric dehorner is used, the operation should be performed when the calf is at least a month old. If a dehorning tool is used, it is preferable to do it when the calf is three to four months old.

Removal of supernumerary teats:

Heifers which are going to be raised for replacements are often found to have, on the hinder quarters of the udder, one or two extra teats which can cause difficulty when the animal starts milking. They should be removed when it is young, i.e. about one or two months old.

Identification: Identification of heifers is a "must". It will also be "de rigueur" under the F₁ program. Several methods are available. Tattooing on the inside of the ear is the official method except for Holsteins, in which case photographs or colour diagrams are used. Ear tags or neck medallions may be used.

Inside up to six months: Finally, while on the subject of management, it is advisable to mention that replacement calves should be kept inside till they are six months old unless conditions outside are identical from the standpoint of health and feeding.

Disease Control

As regards disease control, there are certain rules of general preventive hygiene that should be applied and which we should mention here. Do not allow visitors access to pens unless they are wearing sterile overshoes; eliminate the flies and vermin that carry disease germs; isolate sick animals from healthy ones at the first signs of illness; animals bought at auctions and those that have been to shows should be given antibiotic therapy and isolated from other animals for 15 days.

Principal diseases

As already indicated, the chief diseases that may attack calves are diarrhoea and pneumonia. These are diseases which I would call nutritional and ecological because they are connected with the calf's feeding and environment.

There are other, specific diseases, less common but nevertheless of some importance. In the first place may be mentioned internal and external parasitic infestations. To detect the presence of the former it is usually necessary to examine

the manure. Suitable treatment against them is essential as they retard the calf's growth. External parasites, such as lice, ringworm and warble grubs result from lack of hygiene. The treatment is comparatively easy to apply.

Other diseases that replacement calves must be prevented from getting are blackleg and malignant oedema, which cause havoc in some areas. Vaccination should be carried out at the age of three or four months.

Finally a virus infection which appeared some months ago should be mentioned, namely infectious bovine rhinotracheitis (IBR). It affects the respiratory system. If this disease is diagnosed in a herd, vaccination against it must be given when calves are six to seven months old.

That, in some detail, is the etiology of the principal diseases to which calves are liable between birth and six to seven months of age. One can see that feeding, management, and hygiene play a fundamental role in preventing them.

The results of treating calfhood disorders are often disappointing because the expected results are not always obtained. If farmers want to come out on top they must therefore make sure to give themselves the benefit of every chance of success by enlisting the help of the factors we have mentioned.

QWI

Annual Convention

The 59th Annual Convention of the Quebec Women's Institutes was held May 22 to 25, 1973. All members of the QWI would like to offer their deepest sympathy to Mrs. Alma Jack, of Valcartier, who learned of her husband's death while attending the Board meeting on Wednesday morning. The Board members' thoughts and prayers were with Mrs. Jack as they continued with their meeting.

The theme of this year's Convention, which was attended by over 230 members, was Responsibility Lies With You, and from the success of both the business and entertainment side of the Convention it was evident that each took it to heart. It is a good theme for the months to come as we continue to work for Home and Country.

There are two new names on the list of Provincial Conveners: Miss Viola Moranville from Stanstead County takes on Home Economics and Mrs. Merlin Lewis from Brome County will be looking after Welfare and Health. We wish them the best of luck.

Our thanks are extended to Vice Principal A. C. Blackwood for his warm welcome, and to our guest speakers, Mrs. Allison Grant Andreasson and Mrs. Iris Robbins. We were delighted to have Mr. A. Spear, Advertising Manager for J. & P. Coats, with us to give out the prizes for handicrafts. Our thanks to Mr. Spear and to all at Macdonald who, as always, make us feel so welcome.

Provincial Publicity Convener, Mrs. Perley Clark, and I (Hazel Clarke) thought that it might make an interesting change to wander through the Convention with a tape recorder and ask for comments from the members. As a result, I had over 30 pages of typed copy which had to be cut drastically and some of the interesting comments omitted. I would like to thank all those who talked into the mike and only wish (had space permitted!) that I could have talked to each and everyone of you. I am publishing the interviews more or less in the order I took them and will try to set the time and place.

When I arrived at the tea for the Board members, which was held in the Stewart Room on Wednesday afternoon, I was greeted by a happy hum of voices, which made taping a little difficult. Mrs. Irene Williams, President of Missisquoi County, was there and I asked her if this was her first annual Convention. "No, I've been here several times as a branch representative but this is my first experience as a County representative and, therefore, my first Board meeting. And I think it is wonderful. I wouldn't have missed it for anything. It gives you a chance to meet new people which is the part I enjoy most. I think the Institute is one of the outstanding organizations of all times because we learn so much from it in every way. My own branch (Fordyce) has a membership of 25, and we are very active and have really wonderful meetings."

I had a very long and pleasant chat with Mrs. H. Ellard, who was Provincial President from

1960-64. Among other questions I asked: How many Conventions have you come to?

"I've been coming for over 25 years. I missed some years but I came for this one and I'm enjoying it. I live in Ottawa and came down by bus. I'm a member of Aylmer East (Gatineau Co.), which I think is a good branch. I go to as many meetings as I can but in the winter time if it's too slippery I can't go. Someone comes for me when the weather is good."

Have you a few words of advice that you would like to pass on to some of the younger members? "I realize that there are many women working today who haven't got time and I understand that a woman with a young family has very little time but I would like to see them take on more responsibility than they do."

I left the tea and wandered down to one of the lounges in Stewart Hall where I found two members engaged in quiet conversation. One was Mrs. Eva Lewicki from Val d'Or who told me: "I want to go home with lots of notes. I'm very interested in the W.I. but in our district it's not known enough and it's not organized as well as it could be. I would like to know more about it to do something to help. I think I know what is lacking in many ways and I hope that by attending this convention and talking to other people I'll get ideas and suggestions to help build our branch up. I'm hoping that we can increase our membership and have a good branch."

The other member was Mrs. E. Dunlop from Matagami (Abitibi



Left: Mrs. J. W. Westover presented Mrs. V. R. Beattie with a Life Membership in the F.W.I.C. This and the photos on the following pages were taken at the recent Convention.

North). The bus trip from Matagami was a long one. Mrs. Dunlop left there at 3:30 in the afternoon, travelled all night and arrived in Montreal around 7 a.m. As this was Mrs. Dunlop's first trip to Macdonald, she was enjoying the opportunity before the general Convention started to walk around the Campus, which was looking beautiful, and to meet some of the other members who arrived early. Mrs. Dunlop was looking forward to the Convention. I hope she found it enjoyable.

After the Thursday morning session, which was held in the ballroom of the Centennial Centre, I walked back to Stewart Hall with Mrs. R. Graham, Provincial Convener of Home Economics from Pontiac County. Naturally we discussed the handicraft display. "We have a wonderful display — the pillow cases, for example, are just beautiful. You wonder how a judge can pick the best. We have more handicrafts this year and the different items brought in for display have caused a great deal of interest. There have also been so many articles coming in for Banff with the FWIC Convention in June. We're very pleased with the entries. There must be about 200 which is wonderful considering we were only asked for 100."

It was a glorious day and I took time out to take a few photos and listen to the afternoon session. On my way to dinner I met Mrs. N. Pierce, President of Stanstead County, who had entertained the members with a solo earlier on. She was rushing to catch a bus but I managed to ask her about the Convention.

"I've enjoyed every minute of it. I just wish I could stay a little longer and see the plays this evening."

How long have you been coming?

I was singing here with Mrs. McHarg several times before I came as a delegate and then for the last three years I've been coming as County President." After dinner I spotted Mrs. B. Younie in the handicrafts room and asked her how long she had belonged to Howick Institute in Chateauguay-Huntingdon.

"Since 1913 and I've been to quite a few Conventions. I'm particularly interested in home economics and find the handicrafts very nice. Yes, I have entered something again this year."

Back outside I met Mrs. Jas Robertson, Provincial Convener of Welfare and Health, who had been shopping in Ste. Annes. I asked if she had enjoyed being a Convener. "Very much. I found that the first year, when I was learning the ropes, was the hard year. It's been quite a lot of work and I'm going to miss it now because I won't be in the centre of things as it were. When you're a Convener or if you're on the Executive you are in the middle of everything and it is much more interesting."

Any comments to pass on to the new convener. Words of advice like patience . . .

"Certainly patience and also if you have anything that you want to tell the branches be sure and write to each one. And not just once! You have got to keep doing it. So far I've enjoyed the Convention very much. I'm pleased to see so many people in and I hope they are going to get some-

thing out of it to take home. The informal sessions this afternoon where people asked questions were good. I got a lot of questions about information for programs and how to go about preparing a program. You see none of us is trained in anything and you're given a job and you have to do the best you can with it. So if you can get help from somebody or from other branches it is a good thing, I think."

I'm certain that you have learned a great deal in your convenership.

"Our branch took a St. John Ambulance course this winter. I don't know if we would ever be able to use it in an accident but I hope we would."

During a break in Friday morning's sessions I had a long and interesting conversation with Miss S. Auger from the Quebec Department of Agriculture. Parts of that conversation and the list of prize winners in both handicraft competitions will be in next month's Journal.

The long wait for lunch provided an opportunity to speak to Miss H. Graham who had come from Ottawa to lead the entertainment side of Convention.

"I'm still hoping that all the counties can be contacted and that they'll let us know who will join a choir and what songs they would like to sing at Convention. They could let their Publicity Convener know, for example. The singing last night was quite beautiful — there was lots of harmony. We missed Mrs. Pierce and, of course, we often wonder if Mrs. Bulley won't come back again."



Further back in the line I spoke to Mrs. Gordon French, Provincial Convener of Agriculture from Compton County. We started by discussing radio broadcasts.

"Compton and Stanstead Counties prepare broadcasts which we put on the Sherbrooke station CKTS on the third Monday of every month at 10:45 a.m. The subjects are varied. Miss Moranville from Stanstead quite often speaks on antiques as there are museums in her area."

Would you recommend that other branches or counties get into broadcasting?

"Yes, the theme of this Convention could be blow your own horn and radio broadcasts would be one way of doing this. Contact your radio station and see if they would give you free time. Or possibly you could pay, although I believe it is quite expensive. They like from 10 to 12 minutes to give them about three minutes to do some advertising."

I believe the agriculture conveners got together last night for a meeting. Why?

"Several of our counties, either on the county or branch level, have school fairs and this is worthwhile work with the youth of our communities. We want to renew school fair lists so we had some exhibits and prize lists from fairs. We examined the exhibits and exchanged prize lists in preparation for a really renewed program in school fairs."

Any comments on the Convention?

"It's a very good convention and I've enjoyed it. I think we need to be more active in our own groups to bring material to Convention. I think we need more resolutions from the branches to

give us action at the provincial level."

I moved from the entrance of the dining room to the exit and managed to talk with quite a few members before the afternoon session began. The first was Mrs. T. Zimmer, President of Brownsburg branch in Argenteuil County. The branch took first prize in the plays the night before and I asked Mrs. Zimmer to tell us about the play.

"We couldn't find a play we liked and the member in charge, Mrs. Stevens, mentioned it to her husband who said why don't you put on an old album. And there was our title 'The Old Album.' Three of us got together and wrote out a list of characters. We had the schoolteacher, the minister, the singers, a bathing beauty and so on and then we ad-libbed something to suit each one — something that we knew about each one — with the result that there was no real script. It was easy because, for instance, the episode with the schoolteacher actually happened to her. She was teaching in a little schoolhouse and she wouldn't go out to the privy, as they called it, when the kids were there. So she went after school and one fall day when she was out there the wind got up which made the leaves and the branches rustle and she thought it was a bear. She stayed and she stayed, scared stiff to go out. About an hour later she heard her father calling 'Ruth, Ruth, where are you?' and then she came out."

What did Dr. Kevan, the adjudicator, say about the play?

"He was very pleased that it was original and he said that our characters stayed perfectly still. He also mentioned that the voices

of the two that were talking carried very well and they kept the play moving. There were 23 altogether in the play but only two did the talking. The rest were the pictures. And to them I owe a great vote of thanks, especially one of the girls, a new member this year, who put the play over the best. A lot of credit goes to her."

Changing the conversation, are you enjoying the convention?

"Very much, particularly meeting people and talking over problems. Problems in different branches and getting our ideas across to one another. In Montcalm, for example, they put on a military whist and bring a flower that starts off at the first table and whichever couple wins the highest points will take it to their table. The flower keeps moving all evening which creates interest. We have never thought of trying that and that's one idea to take home. If we find that we do something well, we try to pass it on to somebody else."

One member who always seems busy at Convention is Mrs. W. Rayson, President of Rouville County. Did you know that she has been coming back to Macdonald, off and on, for the past 50 years!

"I graduated from Macdonald in 1923 and I've certainly seen some changes. The new buildings are lovely. And there have been changes in Convention, too. I think they are becoming more modern which is good because we should keep up with the times. I'm enjoying this one very much and as I live alone it's a holiday for me and a wonderful chance to meet people."



Mrs. Perley Clark, Provincial Convener of Publicity from Argenteuil County, and I had many conversations, but this was my first opportunity to get her on tape. Knowing she is a busy farm wife, I'd asked her how she managed to get away for three days.

"First of all I made a great big pot of beef stew and a pot of beans so the men could have some good meals that they could get ready quickly — I just hope the food lasts till I get home. Yes, I expect most of the dishes to be done but I thought I'd be good to them and told them that they could leave today's dishes."

The round table discussion of provincial conveners went over so well — would you comment on it?

"We wanted to try something different. We had two purposes in mind. One was we wanted people to read the annual report books but then some people find reports boring and perhaps by the end some aren't listening. The conversational form, getting in the highlights plus a bit of humour we hoped, would keep everyone interested. I think we covered quite a few of the projects and interests and, of course, we tried to say a bit about publicity."

We're sitting right across from the publicity display — how has it gone over?

"It seems to be very well accepted. Practically every time I've passed it there have been women looking at it and occasionally I've seen someone taking notes. As for the coming year, I'm hoping all branches will send in their features and will continue to send us a variety of subjects."

I sat in with you on the informal publicity discussion yesterday

afternoon following the regular meeting. Are you in favour of this type of thing?

"Yes I am because there are things that the women would like to find out and can't during the general meeting. I am really in favour of it and others are too."

Next I spoke with two women from the Gaspé. The first was Mrs. Colin Campbell, President of Black Cape in Bonaventure County. Mrs. Campbell was telling me that she had enjoyed the plays but the highlight of convention for her are the guest speakers.

"I feel I got a great deal out of Mrs. Andreasson's speech yesterday morning. I have a teenage daughter and many of the things that were brought up are things that happen at home. After listening to her I do feel that the generation gap has closed a little."

A washout had delayed some of the members from the Gaspé but Mrs. Roberts from Dartmouth River in Gaspé County missed it. "I didn't want to come in Thursday morning. I wanted to be here for it all. I came by train and I'm enjoying it very much."

Someone who always looks as if she's enjoying Convention is Mrs. R. Warwick, President of Argenteuil County who told me that she has always enjoyed it.

"The first time I came was in 1945 and then I couldn't come because we had a farm and with all the work I felt I couldn't leave my husband, but the last few years I've come. I feel you get so much good out of meeting people and we all look forward to the tea. I think the Institute is a great thing — we seem to accomplish a good bit of work



and it's all very worthwhile. I also enjoy going to our branches, seeing the work they are doing and meeting the different members."

Mrs. W. Graham, President of Inverness branch, Megantic County was very pleased with the morning:

"I'd like to say that I'm tickled pink that my sister-in-law, Mrs. Muir, had, I think, seven prizes and I was very pleased for her. She worked hard at it. Last year she won the first in the Coats and second this year. Mrs. Muir's sister also won a prize for her pillow cases so we were pleased for Megantic. If I may just add a comment on convention — I hope that next year there will be more informal discussions and it would be wonderful if they could be held in separate rooms as with all of them in one room we cannot hear all that is being said. I find them extremely interesting and helpful and I find our younger and newer members are interested in hearing everything that goes on."

I mentioned the washout earlier. Mrs. Donna Phillips, York branch publicity convener, Gaspé County, told me about it.

"We left Gaspé at the usual time, 1:20, and were driven by taxi to Prével where we waited about half an hour. We boarded the train and went about 20 or 25 miles to Perce when the engineer spotted a washout about 150 feet long. We waited until about 8 o'clock and then were taken by bus to Cape Cove. From there we boarded the Gaspé-bound train which turned around and brought us to Cross Point where there was another washout. From there we were taken by bus to Campbelltown and boarded a train



at 3:40 and came straight through to Montreal arriving at 4 o'clock. We came out by taxi from the station."

Was it worth all the delays and detours?

"Yes, very definitely. It's my first trip and I'd come every year if I had a chance!"

It was time to head back for the last session in the Centennial Centre. Mrs. S. Patterson, Provincial Convener of Citizenship from Gaspé Co., was one of the hostesses and, when she wasn't busy, I asked her how her first year in Citizenship went.

"I've enjoyed it immensely. I've got to know a lot of members through correspondence and meeting them at the Board meeting and I really feel that I have learned a lot about the W.I. We've done very well this past year and are really getting something going. We're learning more about Canada. The twinning idea has been going on for a couple of years but we've really just got started in Quebec. Some of the branches have exchanged scrapbooks with the B.C. branches and I know of several others that are making them. We're also continuing with the pen paling."

Another interesting afternoon and then suddenly it was all over but for the last minute chats and farewells. And just time for some capsule comments from some ladies who have worked and will continue to work extremely hard on behalf of the QWI:

Mrs. A. Burgess, Provincial Secretary from Chateauguay-Huntingdon County: "It was a very successful convention and I think everybody was very satisfied. I do feel that

both speakers were excellent and it was such a lift for all of us."

Past Past President Mrs. G. McGibbon from Argenteuil Co.: "I would like to offer best wishes to everybody here that will carry on Institute as it has been and maybe even bigger and better than ever. In the future I'll just be able to relax and visit. You always wish that you had time to visit with people. That's part of Convention but when you are on the Executive you just haven't time and you feel badly because someone comes along and they want to talk but you can't because you're rushing to do something else. So when you are out of office I think you can do equally as much good as when you are in. I just hope I can do something to help out."

The Treasurer's office is capably filled for another year by Mrs. G. E. Cascadden from Sherbrooke County: "I just couldn't see them stuck and the books must be kept up to date. Then in jest she added: "Somebody told me that if I made a very bad mistake they might put me out next year!"

Congratulations are also offered:

To the new 2nd Vice President, Mrs. W. Coates from Compton Co. "I'm looking forward very much to working with the Executive and I hope that we will be able to have many interesting projects in the years to come."

To 1st Vice President, Miss E. Smith from Sherbrooke County: "I am looking forward to the next few years and I only hope that I will be able to carry my part of

the load and I'm sure the others will be a great help."

To President, Mrs. J. W. Westover from Brome County:

"I enjoyed the convention very much — I always do. I have been coming for 40 years and have missed very few of them, starting out as a branch member, very, very green and continuing on. I am looking forward to the future and with the help of the members, the Executive and officers I'm sure that we will be able to carry on."

To Past President, Mrs. V. R. Beattie from Richmond County: "I've enjoyed my 13 years on the Executive very much and I certainly wish the new officers all the enjoyment and cooperation that has been given to me."

And I am sure that the Executive and the QWI will continue to benefit from her knowledge and experience that comes with 13 years in office. And I thought as I headed for home that that wrapped up another successful convention. But as I listened to the tapes I realized that there was a question I had forgotten to ask. I phoned the College and was told that a broken down bus filled with tired but patient women anxious to get home was still sitting outside Stewart Hall. Back I went and Mrs. Westover explained the situation.

"The driver just couldn't start the bus. We've been sitting here for one hour (it was about 7:30). He was very happy to have 35 ladies to travel with him to Montreal. He put all our bags way up on the racks and then sat down in his seat and nothing happened. I certainly hope all the ladies can catch their

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buses and get home tonight, otherwise we'll have to stay in Montreal."

The bus left about 10 minutes later but not before I asked Mrs. R. Lee, President of Brome County, a couple of questions, including the one I had forgotten to ask: Did you enjoy Mrs. Iris Robbins' demonstrations?

"It was wonderful. Just wonderful. It was so graceful and so beautiful. I have heard of something similar but it was a great opportunity to actually see it. Everyone seemed to enjoy the Convention. I brought a new member with me and she enjoyed it very much and got a lot more out of being a member by coming to Convention than she would by just being in the local group."

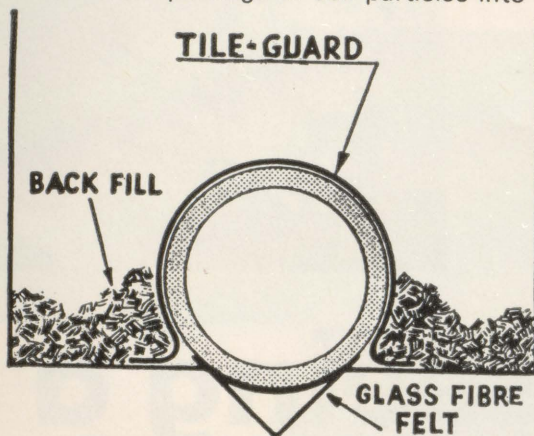
Coming Events

Compton County Women's Institutes will have a display of Modes of Transportation at the Cookshire Fair on August 3, 4, and 5. Remember National Farm Safety Week — July 25 to 31.

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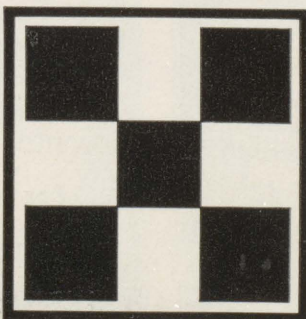
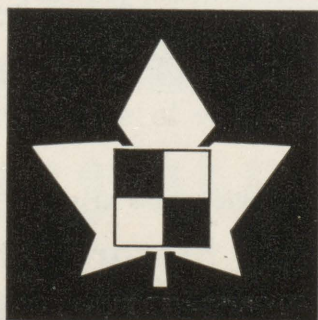


We'll be seeing a lot more of each other.

No matter what area of agriculture you specialize in, no doubt you are already well acquainted with us. Our company and its familiar red and white Checker-board trademark have been closely associated with Canadian agriculture for over 45 years. And that association is still growing as we continue to expand and improve our products and services in response to the growing needs of modern agriculture.

The challenge that faces agriculture today has never been greater. The need to keep pace with a growing world population becomes more imminent every day. New products, new methods, new research, new efficiency are needed as never before, and the Canadian Agrologist is looked to to provide many of the answers.

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